--In certain embodiments, $X^1X^2X^3X^4X^5X^6$ is VRLHES (SEQ ID NO:6), or conservative substitutions thereof, and/or $X^7X^8X^9X^{10}X^{11}X^{12}$ is LGQQVP (SEQ ID NO:7), or conservative substitutions thereof, and/or $X^{14}X^{15}X^{16}$ is RFF (SEQ ID NO:8) or conservative substitutions thereof. In certain embodiments, X^{13} is not a cysteine and in particularly preferred embodiments, X^{13} is A.--

Delete the paragraphs at page 22, lines 12-31, and insert:

--In particularly preferred embodiments, mini-ARGPs are represented by formula I (SEQ ID NO:9):

$$CX^1X^2X^3X^4X^5X^6CX^7X^8X^9X^{10}X^{11}X^{12}CCDPX^{13}ATCYCX^{14}X^{15}X^{16}NAFCYCR_n \quad \text{I}$$

where X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, and X^{16} are independently selected amino acids (including natural, synthetic, or modified amino acids); and n is zero or one. In certain embodiments, in each of the varied domains, one or more of the native residues can be preserved. Thus, for example, $X^1X^2X^3X^4X^5X^6$ (SEQ ID NO:10) includes, but is not limited to $VX^2X^3X^4X^5X^6$ (SEQ ID NO:11), $X^1RX^3X^4X^5X^6$ (SEQ ID NO:12), $X^1X^2LX^4X^5X^6$ (SEQ ID NO:13), $X^1X^2X^3HX^5X^6$ (SEQ ID NO:14), $X^1X^2X^3X^4X^5S$ (SEQ ID NO:15), $VRX^3X^4X^5X^6$ (SEQ ID NO:16), $VX^2LX^4X^5X^6$ (SEQ ID NO:17), $VX^2X^3HX^5X^6$ (SEQ ID NO:18), $VX^2X^3X^4EX^6$ (SEQ ID NO:19), $VX^2X^3X^4X^5S$ (SEQ ID NO:20), $X^1RLX^4X^5X^6$ (SEQ ID NO:21), $X^1RX^3HX^5X^6$ (SEQ ID NO:22), $X^1RX^3X^4EX^6$ (SEQ ID NO:23), $X^1RX^3X^4X^5S$ (SEQ ID NO:24), $X^1X^2LHX^5X^6$ (SEQ ID NO:25), $X^1X^2LX^4X^5X^6$ (SEQ ID NO:26), $X^1X^2LX^4EX^6$ (SEQ ID NO:27), $X^1X^2LX^4X^5S$ (SEQ ID NO:28), $X^1X^2X^3HEX^6$ (SEQ ID NO:29), $X^1X^2X^3HX^5S$ (SEQ ID NO:30), $X^1X^2X^3X^4ES$ (SEQ ID NO:31), $VRLX^4X^5X^6$ (SEQ ID NO:32), $VX^2LHX^5X^6$ (SEQ ID NO:33), VRLHES (SEQ ID NO:34) and the like. Similar permutations are available for $X^7X^8X^9X^{10}X^{11}X^{12}$ (SEQ ID NO:35) (*e.g.* LGQQVP (SEQ ID NO:36), $LX^8X^9X^{10}X^{11}X^{12}$ (SEQ ID NO:37), $X^7GX^9X^{10}X^{11}X^{12}$ (SEQ ID NO:38), $X^7X^8QX^{10}X^{11}X^{12}$ (SEQ ID NO:39), $X^7X^8X^9QX^{11}X^{12}$ (SEQ ID NO:40), $X^7X^8X^9X^{10}VX^{12}$ (SEQ ID NO:41), $X^7X^8X^9X^{10}X^{11}P$ (SEQ ID NO:42), $LGX^9X^{10}X^{11}X^{12}$ (SEQ ID NO:43), $LX^8QX^{10}X^{11}X^{12}$ (SEQ ID NO:44), $LX^8X^9QX^{11}X^{12}$ (SEQ ID NO:45), $LX^8X^9X^{10}VX^{12}$ (SEQ ID NO:46), $LX^8X^9X^{10}X^{11}P$ (SEQ ID NO:47), $LGQX^{10}X^{11}X^{12}$ (SEQ ID NO:48), and the like).

Similarly, the "RFF" domain can be fully mutated or can retain one or more of the native residues. Thus, for example, $X^{14}X^{15}X^{16}$ includes RFF (SEQ ID NO:8), $R^{15}X^{15}X^{16}$ (SEQ ID NO:49), $X^{14}FX^{16}$ (SEQ ID NO:50), $X^{14}X^{15}F$, RFX^{16} (SEQ ID NO:51), $RX^{15}F$ (SEQ ID NO:52), $X^{15}FF$ (SEQ ID NO:53). In certain preferred embodiments, X^{13} is not cysteine.--

Delete the paragraph at page 30, lines 19-26, and insert:

--A feature of the subject non-peptide compounds is that they structurally mimic the active loop 3-D conformation when bound by the receptor. By active loop is meant residues 111-116 or Arg-Phe-Phe-Asn-Ala-Phe (SEQ ID NO:54) of the Agouti Related Protein. More specifically, the subject non-peptide compounds are characterized by substantially structurally mimicking the backbone phi angle of amino acid 113 in AGRP, *i.e.* Phe113 phi = -55.4°, and the U_1-U_2 interatomic distance (see structure below). As the subject compounds substantially structurally mimic the active loop, in 9 of 10 lowest energy structures calculated with distance geometry the following requirements should be met. --

Delete the paragraph at page 30, lines 19-26, and insert:

--Accordingly, one aspect of the invention pertains to a method of treating a disease state in mammals that is alleviated by treatment with a polypeptide having an amino acid sequence: $CX^1X^2X^3X^4X^5X^6CX^7X^8X^9X^{10}X^{11}X^{12}CCDPX^{13}ATCYCX^{14}X^{15}X^{16}N$ AFC YCR_n (SEQ ID NO:9), wherein X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, X^{11}, X^{12}, X^{13}, X^{14}, X^{15}, and n is 0 or 1, which method comprises administering to a mammal in need of such a treatment a therapeutically effective amount of the polypeptide, which can be administered, by way of illustration and not limitation, in a liquid formulations or a solid formulations, such as in the form of a pharmaceutically acceptable salt thereof. In one preferred embodiment, the polypeptide has the amino acid sequence: CVRLHESCLGQQVPCC DPAATCYCRFFNAFCYC (SEQ ID NO:3). In certain embodiments, such a disease state can be a wasting syndrome.--

In accordance with 37 CFR §1.121 a marked up version of the above-amended paragraph(s) illustrating the changes introduced by the forgoing amendment(s) are provided in Appendix C.

REMARKS

This amendment is provided in Response to the Notice to File Missing Parts of Nonprovisional Application. In response to the Notice, Applicant(s) request entry of this